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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,178	12/19/2000	Hans-Jurgen Johann	4476 US	7564

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EXAMINER

PEREZ, GUILLERMO

ART UNIT PAPER NUMBER

2834

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/745,178

Applicant(s)

JOHANN ET AL.

Examiner

Guillermo Perez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenway (U. S. Pat. 5,649,349).

Referring to claim 6, Greenway discloses a rotor for a DC machine comprising:

a multiplicity of armature laminations (28) arranged axially one behind the other, each of which laminations (28) is provided with a locating bore (30), the laminations (28) being connected non-displaceable to one another by holding (18) to form an armature core (figure 3) configured for receiving a motor shaft (column 4, lines 43-45); wherein the locating bore (30) of each of said armature laminations (28) is arranged eccentrically in the respective armature lamination (30); and wherein

- a. individual ones of the armature laminations (30) of the armature core,

or

- b. groups of armature laminations, are arranged

1. with rotation relative to one another by at least one pole pitch,

or

2. the locating bore (30) is formed as a contoured locating hole (circular in figure 1).

Referring to claim 7, Greenway discloses a rotor for a DC machine comprising:  
a multiplicity of armature laminations (28) arranged axially one behind the other, each of which laminations (28) is provided with a locating bore (30), the laminations (28) being connected non-displaceable to one another by holding (18) to form an armature core configured for receiving a motor shaft (column 4, lines 43-45); wherein  
the locating bore (30) of each of said armature laminations (28) is arranged eccentrically in the respective armature lamination (28); and wherein

- a. individual ones of the armature laminations (28) of the armature core,

or

- b. groups of armature laminations, are arranged

1. with rotation relative to one another by one pole pitch,  
wherein the pole pitch is less than 180 degrees,

or

2. the locating bore (30) is formed as a contoured locating hole (circular in figure 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (U. S. Pat. 5,649,349) in view of Hickey (U. S. Pat. 4,136,296).

Greenway discloses a rotor for a machine comprising:

a multiplicity of armature laminations (28) axially one behind the other, which are provided with a locating bore (30) and are connected non-displaceable to one another by holding (18) to form an armature core (figure 3), which is pushed onto a motor shaft (column 4, lines 43-45), wherein

the locating bore (30) of each armature lamination (28) is arranged slightly eccentrically (figures 1 and 3) in the armature lamination (28); and wherein

- a. the individual armature laminations (28) of the armature core

or

- b. groups of armature laminations are arranged such that

1. they are turned in relation to one another by at least one pole pitch

or

2. the locating bore (16) is formed as a contoured locating hole.

Greenway discloses that each armature lamination (10) is arranged on the motor shaft such that it is turned with respect to the adjacent the armature lamination by 45° (column 7, lines 58-63).

However, Greenway does not disclose that the motor shaft is of a smooth form.

Hickey discloses a DC machine in which the motor shaft (31) is of a smooth form for the purpose of holding the laminations under pressure.

It would have been obvious at the time the invention was made to modify the rotor of Greenway and provide it with shaft configuration disclosed by Hickey for the purpose of holding the laminations under pressure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the pole pitch at 45 degrees since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Referring to claim 1, no patentable weight has been given to the method of manufacturing limitations (i. e. pushed as a whole onto the motor shaft) since "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, and 5-8 have been considered but are moot in view of the new ground(s) of rejection.

In response the Applicants' remark that the claims contrast from Greenway in that the laminations are turned by at least one pole pitch, it must be noted that the pitch

limitation is being recited as an alternative limitation to "*the locating bore is formed as a contoured locating hole*". The claims show many of the limitations as alternatives by adding the term "or". In the case of the pole pitch limitation, it is being presented as an alternative limitation to the recitation "*the locating bore is formed as a contoured locating hole*". If the prior art shows the basic limitations (laminations, bore, etc.) and also one or more of the alternative limitations, the prior art reads on the claim.

In response to Applicant's remark that Greenway does not teach the eccentric arrangement of the bores in the laminations, it must be noted that Greenway acknowledges this arrangement in figure 3. As clearly shown in figure 3, the bores 30 of one lamination 28 is eccentric ("*located elsewhere than at the geometrical center*" Merriam-Webster's Collegiate Dictionary Tenth Edition). Greenway teaches the matter of the claims.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Hickey teaches that the laminations 40-43 are held on the shaft 31 by the ring 44. The shaft in this embodiment need to have a smooth shape since the laminations need to be slid on the

shaft, and the ring 44 could not properly hold together the stack of laminations as specified on column 4, lines 40-43, lines 49-51, and line 58 through column 5, line 42.

In response to Applicants' remark that the Examiner fails to show where Hickey describes the shaft with smooth form, it must be noted that figures 3-6 show a shaft 31 with smooth form ("*having a continuous even surface*" Merriam-Webster's Collegiate Dictionary Tenth Edition). Hickey discloses that during rotation, the laminations will tend to reach a minimum energy position. The ring 44 or 55 will apply pressure on the laminations toward the shaft surface. If the shaft had a rough surface the laminations, under the influence of the ring 44, 55, would not be able to slide on the surface of the shaft to correct a possible unbalance. Thus, a smooth shaft is preferred to improve the rotation of the armature.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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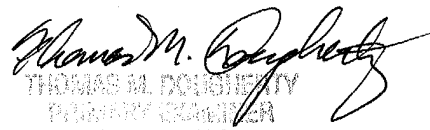
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez  
November 15, 2002

  
THOMAS M. DONOHERTY  
PATENT EXAMINER  
ART UNIT 2834  
